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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/991,357	11/21/2001	Peter Everett Brooks	6954.01	3338

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DORSEY & WHITNEY LLP  
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MINNEAPOLIS, MN 55402-1498

EXAMINER

NICOLAS, FREDERICK C

ART UNIT	PAPER NUMBER
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3754

DATE MAILED: 01/27/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/991,357

Applicant(s)

BROOKS, PETER EVERETT

Examiner

Frederick C. Nicolas

Art Unit

3754

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 28 November 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-58 is/are pending in the application.
- 4a) Of the above claim(s) 10,18 and 24 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9,11-17,19-23 and 25-58 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 1-58 are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Allowable Subject Matter***

1. The indicated allowability of claims 8-9,16-17,22-23,32,36,45-46,50,54-56 are withdrawn in view of the newly discovered reference(s) to Newbold et al. 6,250,515.

Rejections based on the newly cited reference(s) follow.

***Claim Objections***

2. Claim 28 is objected to because of the following informalities: in claim 28, line 2, "the target substrate" should be --a target substrate--. Appropriate correction is required.

***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-2,4,11,20-21,25-27,29-31,33,37-40,42,45-46,51-57 are rejected under 35 U.S.C. 102(e) as being anticipated by Newbold et al. 6,250,515.

With respect to claims 1,11,20,25,31,37-40,45-46,51-56, Newbold et al. disclose a liquid dispensation device (10), which comprises a pin element/transfer pin (24) moveably oriented to move between a retracted position and an extended position (col. 3, ll. 31-34), a drive element (40, 42) operatively coupled with the pin element (col. 3, ll. 50-52), wherein the drive element is operating the pin element (col. 3, ll. 50-52), wherein

Art Unit: 3754

the drive element is not mechanically coupled with the pin element as seen in Figure 1, a nozzle (12) defining a chamber (22) and a dispensation orifice (26) communicating with the chamber, a driven element (32) in contact with the pin element/transfer pin, the driven element being magnetically coupled with the drive element, wherein the drive element is oriented to magnetically move the driven element (col. 3, ll. 63-67 onto col. 4, ll. 1-4), the pin element/transfer pin further includes selectively moving the pin element/transfer pin by fluid pressure (60), a second drive element (42), the second drive element being a magnet (col. 3, ll. 50-52), a substrate (col. 4, ll. 2-4).

With respect to claim 2, Newbold et al. disclose that the drive element is magnetically coupled with the pin element (col. 3, ll. 50-53).

With respect to claims 4 and 21, Newbold et al. disclose that the drive element is a magnet (col. 3, ll. 50-53).

With respect to claim 26, Newbold et al. disclose that a liquid receiving opening (14) in the nozzle, the liquid receiving opening being in fluid communication with the chamber (col. 3, ll. 9-12).

With respect to claim 27, Newbold et al. disclose that the liquid receiving opening is opposite the dispensation orifice as seen in Figure 1.

With respect to claims 29,42,57 Newbold et al. disclose that the transfer pin motion is hydraulically restrained by the liquid in the chamber as seen in Figure 2 and it is inherent that the transfer pin motion of Newbold et al. is hydraulically restrained by the liquid in the chamber in as much as the applicant's claimed invention.

With respect to claim 30, Newbold et al. disclose that the transfer pin inhibits any inadvertent escape of the liquid from the dispensation orifice (col. 4, ll. 4-12).

With respect to claim 33, Newbold et al. disclose that the drive element magnetically defines a positional limit for a retracted position and a dispensing position of the transfer pin (col. 3, ll. 50-50-67 onto col. 4, ll. 1-12).

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 3,8-9,12-17,19,22-23,28,32,34-36,41,43-44,47-50 and 58 are rejected under 35 U.S.C. 103(a) as being unpatentable over Newbold et al. 6,250,515 in view of Blette et al. 5,186,982.

Newbold et al. have taught all the features of the claimed invention except that the extended position describing a portion of the pin element extending out of the chamber. Blette et al. teach the use of having a pin element (22) in a retracted position and an extended position within a chamber (14,16) (col. 2, ll. 3-31 and col. 2, ll. 60-64), where in the extended position describing a portion of the pin element extending out of the chamber through the orifice (46) (col. 3, ll. 43-64).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the nozzle end (12) including the valve seat (28) of Newbold et al. as taught by Blette et al. (col. 2, ll. 3-31 and col. 2, ll. 60-64) and (col. 3,

Art Unit: 3754

ll. 43-64), in order to carry the liquid product from the chamber through the outlet by the forward end and remains in attachment with the forward end until deposited to a location closely adjacent a workpiece, such that at least a portion of the quantity of liquid materials is transferred from the pin to the workpiece.

7. Claims 5-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Newbold et al. 6,250,515 in view of Miller et al. (U.S 5,758,650).

Newbold et al. have taught all the features of the claimed invention except for the magnet is a rare earth magnet. Miller et al. teaches the use of a rare earth magnet (400), where the rare earth magnet is Smco (col. 6, ll. 30-39).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to substitute the magnet of Newbold et al. with the magnet of Miller et al. in order to provide a different type of magnets that are magnetically much stronger for a given size than ferrous magnets and they have a higher resistance to demagnetization.

### ***Response to Arguments***

8. Applicant's arguments filed 11/28/2003 have been fully considered but are moot in view of the new ground(s) of rejection. Any remaining arguments have been fully addressed in the above rejection.

### ***Conclusion***

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Frederick C. Nicolas whose telephone number is (703)-

Application/Control Number: 09/991,357  
Art Unit: 3754

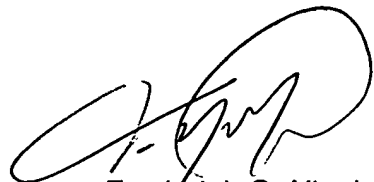
Page 6

305-6385. The examiner can normally be reached on Monday - Friday from 9:00 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mancene L Gene supervisor, can be reached at (703) 308-2696. The fax phone number for the organization where this application or proceeding is assigned is (703)-872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)-308-0861.

FN  
January 25, 2004



Frederick C. Nicolas  
Patent Examiner  
Art Unit 3754

1/28/04